

Thyroid

FROM HYPO- TO HYPERTHYROIDISM

Quality of Life in Patients With Hypothyroidism

Miguel Pereira, MD¹, Celestino Neves, MD¹, João Sérgio Neves, MD¹, Davide Carvalho, MD, PhD².

¹Department of Endocrinology, Diabetes and Metabolism, São João Hospital Center, Faculty of Medicine of University of Porto, Porto, Portugal, ²Department of Endocrinology, Diabetes and Metabolism, São João Hospital Center, Faculty of Medicine of University of Porto, I³S Instituto de Investigação e Inovação em Saúde, Porto, Portugal.

Introduction: The quality of life (QoL) of thyroid diseases has been less studied than other chronic diseases. There is however evidence suggesting long lasting physical and psychological symptomatology related to thyroid diseases.

Objective: To analyze the QoL in patients with hypothyroidism.

Methods: We evaluated 274 patients with a mean age of 56.2 ± 14.2 years, 89.1 % female and divided them by diagnosis: autoimmune thyroiditis (AIT, n = 145), multinodular goiter (MG, n = 31), total thyroidectomy (TT) for thyroid cancer (n = 46), total thyroidectomy for MG (n = 36), TT for Graves disease (GD, n = 9) and radioactive iodine therapy (RAI) for GD (n = 7), and assessed thyroid function tests, thyroid antibodies, lipid profile, high-sensitivity C-reactive protein, vitamin B12, folic acid and applied the Thyroid Dependent Quality of Life questionnaire (ThyDQoL). Statistical analysis was performed with the One-way ANOVA test and Pearson's correlation test. P values ≤ 0.05 were considered as statistically significant.

Results: In this sample, the subgroups who reported worse QoL were the TT for thyroid cancer (-2.47 points) followed by the RAI for GD (-2.14 points) and the AIT (-2.11 points), although these differences were not statistically significant. Regarding the internal domains of the ThyDQoL, we found a significant difference between the subgroup TT for thyroid cancer and MG in bodily discomfort (-4.03 ± 3.61 vs -1.47 ± 1.66; p = 0.04) and household tasks (-2.95 ± 2.92 vs -0.90 vs 1.61; p = 0.02). Within the subgroups, we observed significant correlations involving QoL and vitamin B12 in the AIT subgroup (r = 0.16; p = 0.05), between QoL and lipoprotein(a) (r = -0.50; p = 0.03) in the MG subgroup, between QoL and free T3 (r = -0.31; p = 0.03) in the TT for thyroid cancer subgroup and between QoL and free T3 (r = -0.76; p = 0.04) in the RAI for GD subgroup.

Conclusions: In this study we found that patients submitted to TT for thyroid cancer had the worse QoL among patients with hypothyroidism. This may be related to the use of thyroid hormone suppressive therapy. We also observed that certain domains of QoL are more affected by some causes of hypothyroidism. Further studies are needed to analyze more deeply the symptomatology that contributes to worsening of QoL in these patients.

Thyroid

FROM HYPO- TO HYPERTHYROIDISM

Serum TSH Levels Normalisation in Patients Affected by Autoimmune Atrophic Gastritis, After the Switch

From Oral L-T4 in Tablet Form to L-T4 in Liquid Formulation

Poupak Fallahi, MD, Silvia Martina Ferrari, MSc, Giusy Elia, MSc, Francesca Ragusa, MSc, Sabrina Rosaria Paparo, MSc, Iliaria Ruffilli, MSc, Alessandro Antonelli, MD.

Department of Clinical and Experimental Medicine, University of Pisa, Pisa, Italy.

Patients affected by autoimmune atrophic gastritis could have some issues in L-thyroxine (L-T4) absorption, due to drug malabsorption, induced by the increased gastric pH. Different factors influence L-T4 absorption, such as dietary habits, interference with other drugs, absorption kinetics, age of the patient, adherence to therapy, and others. We enrolled 36 patients affected by autoimmune atrophic gastritis with high serum thyrotropin (TSH) levels under therapy with L-T4 in the tablet formulation. L-T4 tablets were changed to an oral liquid L-T4 preparation, maintaining the same dose. The switch from L-T4 in tablet formulation to the liquid one, at the same L-T4 dosage, led to the normalisation/reduction of circulating TSH levels. Then 14 patients, who were switched back again to receive L-T4 in tablets (with the same dose), had a worsening of TSH values, falling in the hypothyroid range. In conclusion, our findings led to hypothesize that the pH alteration issue caused by autoimmune atrophic gastritis could be overcome by the oral L-T4 liquid formulation administration.

Thyroid

FROM HYPO- TO HYPERTHYROIDISM

The Application of ThyPRO Questionnaire in Patients With Graves' Disease Treated With Antithyroid Medications

Chiauw Ling Chng, MBBS, MRCP(UK)¹, Shui Boon Soh, MBBS, MRCP(UK)², Priscilla Pei Sze Chiam, MBChB, MRCP(UK)³, Stephanie Man Chung Fook-Chong, MSc¹, Wei Lin Tay, MD, MRCP(UK), MMed(Int Med)³, Jielin Yew, MBBS, MRCP(UK)².

¹Singapore General Hospital, Singapore, Singapore, ²Changi General Hospital, Singapore, Singapore, ³Sengkang General Hospital, Singapore, Singapore.

Background: The ThyPRO-39 questionnaire assesses health-related QoL (HRQoL) in patients with benign thyroid disease and has been validated for use in the local setting. The aim of the study is to investigate disease specific health-related quality of life using ThyPRO-39 in patients with newly diagnosed Graves' disease treated with antithyroid medications over one year. **Methods:** Patients with newly diagnosed Graves' disease were recruited in the outpatient setting. The ThyPRO-39 questionnaire was administered at baseline, 6 and 12 months of antithyroid medication treatment. Relevant demographic and clinical information was collected at the three time points of the study. Results of clinical parameters and various ThyPRO scales were compared between baseline, 6 months and 12 months of treatment. **Results:** There were 32 patients with newly diagnosed Graves' disease recruited between April 2018 and May 2019. All except 2 patients completed all 3 time points of the study. Two patients missed their 6 months questionnaire. There were 24 females (75%) and 8 males (25%) in the study. Analysis of the clinical parameters